

## **REMARKS**

### **I. Applicants Interview Summary**

Applicants thank Examiner Huynh for her time in participating in the telephonic interview with the undersigned agent and David A. Gass. Applicants agree with the interview summary mailed by Examiner Huynh on April 23, 2008.

### **II. Preliminary Remarks**

Claim 45 is amended herein to recite the observed molecular weight associated with unprocessed (i.e., full-length) VEGF-D (i.e., ~53 K). Support for this amendment can be found in the specification as filed. See, for example, in paragraphs [0113] and [0179]. Accordingly, no new matter has been added by the amendment to claim 45.

New claims 48-50 are added herein and claim 9 is canceled. Support can be found throughout the application as filed. See, for example, in Example 9. Accordingly, no new matter has been added by the introduction of claims 48-50.

The amendments or the cancellation of claims are made solely to expedite prosecution and not for reasons pertaining to patentability. Applicants reserve the right to pursue the subject matter of any claim (whether original, canceled or amended) in continuation applications.

**III. The rejection under 35 U.S.C. § 112, second paragraph, is moot and should be withdrawn.**

The Examiner rejected claims 9-13, 41 and 45-47 as being incomplete for allegedly missing the step of contacting the sample with an antibody that binds to unprocessed VEGF-D. While Applicants continued to disagree with the Examiner, claim 45 as amended recites the step of “contacting a sample from an organism with a neoplastic disease with an antibody that specifically binds VEGF-D.” Support for this amendment can be found in the specification as filed. See, for example, pages 24-27 and 37. Once VEGF-D in the sample is detected, one of skill in the art can easily determine the amount of unprocessed VEGF-D in the sample using the teachings in the specification or by other

methods known in the art. For example, the specification discloses how to measure the amount of unprocessed VEGF-D polypeptide having an observed molecular weight of ~53 K in a sample in paragraphs [0112]-[0113] and [0179]. Accordingly, one of skill in the art would appreciate upon review of the specification how to measure the amount of unprocessed VEGF-D in the sample as recited in claim 45 and new claim 48. In view of the foregoing, Applicants request that the rejection under 35 U.S.C. § 112, second paragraph, be withdrawn.

#### **IV. The rejection under 35 U.S.C. § 102(b) should be withdrawn.**

The Examiner rejected claims 9-13, 41 and 45-47 under 35 U.S.C. § 102(b) as allegedly being anticipated by WO 98/33485 (“Achen II”). Applicants request reconsideration of the rejection in view of the following remarks.

The present application teaches that increased amounts of *unprocessed* (i.e., full-length) VEGF-D expressed in tumors correlates with faster tumor growth and increased metastatic risk compared to expression other forms of VEGF-D in tumors (i.e., fully processed or truncated portions of VEGF-D). See, Examples 9 and 13 of the present application.

Achen II generically discloses methods of detecting VEGF-D in a sample and methods of screening for cancer associated with VEGF-D, but Achen II does not specifically disclose or suggest measuring both the amount of unprocessed VEGF-D having a molecular weight of ~ 53K in the sample for *diagnosing the growth characteristics* of a neoplastic disease based on the amount of *unprocessed* VEGF-D in a sample. In fact, Achen II at page 20, line 10 states “**Quantitation** of VEGF-D in cancer biopsy specimens will be useful as an indicator of future metastatic risk” (emphasis added). Thus, Achen II teaches the amount of VEGF-D in the sample, and not a particular form of the VEGF-D (i.e., unprocessed VEGF-D having a molecular weight of ~ 53K), is useful as an indicator of metastatic risk.

Moreover, Achen II also does not specifically disclose that tumors expressing *unprocessed* VEGF-D generate more blood and lymphatic vessels than tumors expressing other forms of VEGF-D. The present application is the first disclosure of the association between the amount of *unprocessed* VEGF-D and the intensity of the resulting tumors.

The Examiner further asserts that the recitation measuring the size of VEGF-D in the sample is an inherent step because Achen II discloses an antibody (antibody “4A5”) that binds to unprocessed VEGF-D. Applicants disagree with the Examiner’s analysis. Achen II teaches that the 4A5 antibody was *generated against a processed form* of VEGF-D known as VEGF-D $\Delta$ N $\Delta$ C. (See Achen II at pp. 31-32.) Because antibody 4A5 binds to processed VEGF-D (i.e., VEGF-D having a molecular weight of ~21K), the *in situ* experiments cited by the Examiner cannot be fairly interpreted as a measurement of the quantity of unprocessed VEGF-D (i.e., VEGF-D having a molecular weight of ~53K). Analysis of a tissue section with an antibody that binds an epitope found in both unprocessed, partly processed, and mature VEGF-D can provide information about the distribution of VEGF-D in the sample and the total quantity of VEGF-D, but does not indicate which forms of VEGF-D are being measured. Thus, the Achen II experiments (which are repeated as Example 4 in the current application) do not teach “measuring the amount of unprocessed VEGF-D having a molecular weight of ~53K”, and therefore Achen II does not anticipate the claims expressly or inherently.

Because Achen II does not specifically disclose methods of screening for a neoplastic disease characterized by an increase in the amount of *unprocessed* VEGF-D having a molecular weight of ~53K in cancers, it does not anticipate any of claims 9-13, 41 and 45-47 or new claims 48-50. Anticipation requires that the cited art disclose each and every element of the claims, which is not the case here. In view of the foregoing, Applicants respectfully request that the rejection of claims 9-13, 41 and 45-47 under 35 U.S.C. § 102(b) be withdrawn.

## V. Conclusion

For the foregoing reasons, Applicants request withdrawal of all outstanding rejections and allowance of the pending claims. No other fees are believed to be due with the filing of this paper. However, the Director is authorized to charge any additional fees deemed necessary to Deposit Account No. 13-2855, under order number 28967/5680D.

If the Examiner believes that a telephone conversation would expedite allowance of the claims, she is invited to contact the undersigned agent or David A. Gass, attorney for applicants, at the number below.

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Respectfully submitted,

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